

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-16 (canceled).

17. (new): A CDMA baseband receiving apparatus comprising:

a maximum correlation peak phase detecting section configured to detect as long code phase candidates, correlation peak phases having a plurality of larger ones of correlation values obtained by carrying out correlation calculation between a spread modulation signal and a short code over a plurality of long code periods;

a long code generating section configured to generate long codes corresponding to said long code phase candidates;

a threshold value determining section configured to detect a long code having a maximum one of correlation values obtained through correlation calculation between a spread code which is generated from said short code and said long code generated by said long code generating section, and said spread modulation signal, said long code having said correlation value more than a threshold value, and to determine said long code as a long code peculiar to said base station;

a known base station delay profile generating section configured to generate delay profiles for a plurality of base stations, from which signals are on reception, based on a spread

code generated from said short code and said long code determined by said threshold value
determining section; and

a main path detecting section configured to detect said correlation peak phases with said plurality of larger correlation values which are stored in said known base station delay profile generating section to supply to demodulation correlation section,

a section configured to delete said long code phase candidates having same phases as said plurality of upper ones of said correlation peak phases said correlation peak phase in the delay profile for said plurality of base stations on said reception from said long code phase candidates and detecting long code phase candidates.

18. (new): The CDMA baseband receiving apparatus according to claim 1, further comprising:

a known base station phase detecting section configured to delete said long code phase candidates having same phases as said plurality of larger ones of said correlation peak phases in said delay profiles for said plurality of base stations on said reception from said long code phase candidates and for detecting long code phase candidates,

wherein said long code generating section generates the long codes in correspondence to said long code phase candidates outputted from said known base station phase detecting section, and

said main path detecting section detects said plurality of correlation peak phases corresponding to the plurality of larger correlation values from said delay profiles for the base stations on the reception and supplies to a demodulation correlation section.

19. (new): The CDMA baseband reception apparatus according to claim 1, further comprising:

a known base station correlation peak phase detecting section configured to detect the correlation peak phases which exceed a preset threshold value from said delay profiles for a plurality of said base stations; and

a known base station correlation peak phase memory section configured to store the correlation peak phases detected by said known base station correlation peak phase detecting section,

wherein said maximum correlation peak phase detecting section detects as the long code phase candidates, the correlation peak phases obtained by deleting the correlation peak phases corresponding to the correlation peak phases stored in said known base station correlation peak phase memory section from the correlation peak phases with said plurality of larger correlation values of the correlation values of short code and a spread modulation signal during a plurality of long code periods,

said long code generating section generates the long codes in correspondence to said long code phase candidates outputted from said maximum correlation peak phase detecting means, and

said main path detecting section detects the correlation peak phases with the larger correlation values from said delay profiles for said base stations on the reception and supplies to said demodulation correlation section.

20. (new): The CDMA baseband reception apparatus according to claim 1, further comprising:

a known base station correlation peak phase detecting section configured to detect the correlation peak phases which exceed a preset threshold value from said delay profiles for said base stations, and

a known base station correlation peak phase memory section for storing the correlation peak phases detected by said known base station correlation peak phase detecting section,

wherein said maximum correlation peak phase detecting section detects as the long code phase candidates, the correction peak phases obtained by deleting the correlation peak phases corresponding to the correlation peak phases stored in said known base station correlation peak phase memory section from the correlation peak phases with the plurality of larger correlation values of the correlation values of the short code and the spread modulation signal during the plurality of long code periods,

said long code generating section generates long codes in correspondence to the long code phase candidates outputted from said maximum correlation peak phase detecting section, and

said main path detecting section detects the correlation peak phases of the plurality of larger correlation values from the correlation peak phases stored in said known base station correlation peak phase memory section and supplies to said demodulation correlation section.

21. (new): The CDMA baseband reception apparatus according to claim 3, wherein said maximum correlation peak phase detecting section detects and stores the long code phase candidates the correlation peak phases remained when the correlation peak phases which do not exceed the preset threshold value are detected.

22. (new): The CDMA baseband reception apparatus according to claim 4, wherein said maximum correlation peak phase detecting section detects and stores the long code phase candidates the correlation peak phases remained when the correlation peak phases which do not exceed the preset threshold value are detected.

23. (new): The CDMA baseband reception apparatus according to claim 1, further comprising;

a known base station correlation peak phase detecting section configured to detect the correlation peak phases which exceed a preset threshold value from said delay profiles for the plurality of base stations;

a known base station correlation peak phase memory section configured to store the correlation peak phases detected by said known base station correlation peak phase detecting section; and

a correlation value memory section configured to store the correlation values of the short code and the diffusion modulation signal during the plurality of long code periods by masking the correlation values of the correlation peak phases stored in said known base station correlation peak phase memory section,

wherein said maximum correlation peak phase detecting section stores the correlation peak phases of the plurality of larger ones of the correlation values stored in said correlation value memory section as the long code phase candidates,

said long code generating section generates the long codes in correspondence to the long code phase candidates outputted from said maximum correlation peak phase detecting section, and

said main path detecting section detects the correlation peak phases of the plurality of larger correlation values from the correlation peak phases stored in said known base station correlation peak phase memory section and supplies to said demodulation correlation section.

24. (new): The CDMA baseband reception apparatus according to claim 1, wherein said threshold value determining section takes the maximum correlation value of the next larger phase candidate when the maximum correlation value is smaller than the preset threshold value, and detects and determines the long code with the correlation value larger than the preset threshold value as the long code peculiar to the base station.